Birzeit University

**Biology and Biochemistry Department**

**BIOL 244**

**Cell Biology lab**

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**Teacher Assistance: Deema Mohsen**

**Date of Experiment: 4\4\2022**

**Titles: Scientific investigation.**

**Objective: Difference between allometric and isometric growth.**

**Introduction: Growth and reproduction are two of the most fundamental processes in the relative growth rates of different body. When describing the changing relative rates of growth we used two concepts "allometry and allometric growth". allometry is the quantitative relationship between growth and allocation, Traits are said to exhibit allometric variation when they do not scale isometrically to some measure of size (Certain parts of living things develop at different rates), which might result from the different developmental processes but when two parts grow at the same pace (at the same rate) it becomes isometric growth. Allometric growth occur when some part of the organism grows at a rate different from the rest of the organism during development. For example, if a human's arms and legs grow isometrically, their lengths relative to the body will be the same in a newborn as in an adult.**

**Data:**

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| **Number**  | **Body part** | **A1** | **A2** | **A3** | **A4** | **A5** | **A6** | **A7** | **A8** | **A9** | **A10** | **A11** | **A12** | **A13** | **A14** | **A15** |
| **1** | **Length**  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **2** | **head** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **3** | **hand** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **4** | **span** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **5** | **Total leg** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **6** | **Rump length**  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **7** | **Foot length**  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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